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| 09/747,296 | 12/22/2000 | Tal I. Lavian | 120-081 | 2616 |

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| EXAMINER | |
|---|---|
| LEE, ANDREW CHUNG CHEUNG | |
| **ART UNIT** | **PAPER NUMBER** |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/747,296 | LAVIAN ET AL. | |
| | Examiner | Art Unit | |
| | Andrew C. Lee | 2616 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *26 April 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1 and 3-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 3-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Response to Amendment*

Claims 1, 3 – 24 are pending.

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1, 20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Regarding claim 1, the amended subject matter "selectively modifying a priority of the traffic in response to ....." as disclosed in lines 5 – 9 of claim1 is not properly described explicitly or implicitly in the specification. The specification does not indicate and demonstrate clearly how this "selectively modifying a priority of the traffic" be performed. Regarding claim 20, the amended subject matter "selectively modifying a priority of the traffic using parameter information...." as disclosed in lines 7 – 10 of claim 20. The specification does not indicate and demonstrate clearly how this "selectively modifying a priority of the traffic using parameter information" be performed.

***Claim Objections***

3. Claim 13 is objected to because of the following informalities:

Regarding claim 13, page 4, line 7, the term "a type of type packet traffic" should be corrected as " a type of packet traffic".

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 3 – 10, 12 – 15, 17, 19 – 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Hoffman et al. (U.S. 6094435).

Regarding Claims 1, 20, Hoffman et al. disclose a packet forwarding device (recited "multilayer network element" correlates to a packet forwarding device; Fig.1, Fig. 2, element 12, column 8, lines 55 – 60) comprising: monitoring types of packet traffic received in the packet forwarding device (recited "keeps track of the addresses of the end stations that transmit a packet showing up on one of ports" correlates to monitoring types of packet traffic received; Fig. 1, column 7, lines 6 – 10, recited " address independent

classes" correlates to types of packets; column 13, lines 14 – 29); determining whether a type of packet traffic received in the packet forwarding device is a unicast type or a multicast type (recited "whether the packet is part of a multicast routing" and "in a unicast route" correlates to determining whether a type of packet traffic received in the packet forwarding device is a predetermined type ; column 16, lines 62 – 67, column 17, lines 1 – 9); and when the type of packet traffic is unicast type (column 17, lines 5 – 9), selectively modifying a priority of the traffic in response to a destination parameter of the packet traffic (recited "an output port need not make any modifications to the header except for inserting its MAC address and computing a new packet checksum when routing unicast" correlates to modifying a priority of the traffic in response to a destination parameter of the packet traffic; column 15, lines 65 – 67, column 16, line 1); and, when the type of traffic is multicast type (recited "the entry may indicate whether the packet is part of a multicast routing" correlates to the type of traffic is multicast type; column 16, lines 64 – 65), selectively modifying a priority of the traffic in response to a source parameter of the packet traffic (column 15, lines 60 – 67, column 16, lines 1 – 2, column17, lines 1 – 4), wherein the step of selectively modifying the priority includes performing at least one of changing assignment of the packet traffic from a queue having a first priority to a queue having a second priority (recited "generates the queue selection" correlates to changing assignment of the predetermined type of packet traffic from a queue , Q1 low priority queue as best effort queue (second priority) and Q3 as high priority queue (first priority); Fig. 8, column 19, 63 – 67, column 20, lines 1 – 23), dropping packets of the packet traffic (recited "the queue Qi having the lowest priority, overflows, then the packets are discards"

correlates to dropping packets of the packet traffic, column 22, lines 46 – 50, 56 – 63), copying packets of the packet traffic, and diverting packets of the predetermined type in the packet traffic (column 18, lines 41 – 48).

Regarding Claim 2, Hoffman et al. disclose the limitation of packet traffic is based on its source (recited "contains an entry for the layer 2 source transmitting the packet" and "source address" correlates to packet traffic is based on its source; column 11, lines 19 – 32, 44 – 47).

Regarding Claims 3 and 23, Hoffman et al. disclose the limitation of the method of claimed wherein sources parameter includes a source MAC address (recited "an entry for the layer 2 source transmitting the packets" and "the values of the MAC address of the source" correlates to sources parameter including a source MAC address; column 11, lines 19 – 25, lines 44 – 47).

Regarding Claim 4, Hoffman et al. disclose the limitation of the method of claimed wherein sources parameter includes a source VLAN (recited " a virtual LAN (VLAN) identifier" correlates to sources parameter includes a source VLAN; column 9, lines 27 – 33, column 11, lines 47 – 54).

Regarding Claims 5, 21, Hoffman et al. disclose the limitation of the method of claimed wherein packet traffic is associated with its ingress port (recited "the input port

has buffered at least the first 64 bytes of the received packet" correlates to packet traffic is associated with its ingress port; Fig. 3, column 9, lines 15 – 26).

Regarding Claims 6 and 22, Hoffman et al. disclose the limitation of packet traffic is based on its destination (recited "an entry indicating the port of the destination address" correlates to packet traffic is based on its destination; column 11, lines 39 – 41).

Regarding Claim 7, Hoffman et al. disclose the limitation of the method of claimed wherein the destination parameter includes a destination MAC address (recited "output port need not make any modifications to the header except for inserting its MAC address" correlates to destination of packet includes a destination MAC address; column 15, lines 65 – 67).

Regarding Claim 8, Hoffman et al. disclose the limitation of the method of claimed wherein the destination parameter includes a destination VLAN (recited "a VLAN requires an outgoing tag" correlates to destination of packet includes a destination VLAN; column 16, lines 23 – 26, lines 36 – 40).

Regarding Claim 9, Hoffman et al. disclose the method of claimed wherein the type of packet traffic is associated with its egress port (recited "the input port then passes information about where the packet is stored to the appropriate output port" correlates to packet traffic is associated with its egress port; column 10, lines 18 – 31).

Regarding Claim 10, Hoffman et al. disclose the limitation of the method of claimed wherein the type of traffic is based on its protocol (recited " ARP, RSVP" correlates to protocol; column 13, lines 14 – 29).

Regarding Claim 12, Hoffman et al. disclose the limitation of the method of claimed wherein the protocol of traffic includes HTTP (recited " http" correlates to the protocol of traffic includes HTTP; column 13, lines 62 – 65).

Regarding claim 13, Hoffman et al. disclose a packet forwarding device (recited "multilayer network element" correlates to a packet forwarding device; Fig.1, Fig. 2, element 12, column 8, lines 55 – 60) method comprising: monitoring environmental conditions of reception of packet traffic in the packet forwarding device (recited "keeps track of the addresses of the end stations that transmit a packet showing up on one of ports" correlates to monitoring environmental conditions of reception of packet traffic; Fig. 1, column 7, lines 6 – 10, recited " address independent classes" correlates to types of packets; column 13, lines 14 – 29); determining whether environmental conditions of reception of packet traffic in the packet forwarding device meet predetermined criteria (column 13, lines 2 – 13), and when the environmental conditions of reception of packet traffic meet the predetermined criteria, modifying a priority of the packet traffic using parameter information associated with a type of packet traffic (column 15, lines 60 – 67, column 16, lines 1 – 2), wherein the type of packet traffic includes unicast and multicast

traffic (recited "whether the packet is part of a multicast routing" and "in a unicast route" correlates to determining whether a type of packet traffic received in the packet forwarding device is a predetermined type; column 16, lines 62 – 67, column 17, lines 1 – 9), and wherein source parameter information is used for multicast traffic (column 16, lines 64 – 67, column 17, lines 1 – 2) and destination parameter information is used for unicast traffic (column 17, lines 7 – 9), and wherein the step of selectively modifying the priority includes performing at least one of changing assignment of the packet traffic from a queue having a first priority to a queue having a second priority (recited "generates the queue selection" correlates to changing assignment of the predetermined type of packet traffic from a queue , Q1 low priority queue as best effort queue (second priority) and Q3 as high priority queue (first priority); Fig. 8, column 19, 63 – 67, column 20, lines 1 – 23), dropping packets of the packet traffic (recited "the queue Qi having the lowest priority, overflows, then the packets are discards" correlates to dropping packets of the packet traffic, column 22, lines 46 – 50, 56 – 63), copying packets of the packet traffic, and diverting packets of the predetermined type in the packet traffic (column 18, lines 41 – 48).

Regarding Claim 14, Hoffman et al. disclose the limitation of the method of claimed wherein the environmental conditions meeting the predetermined criteria include time of day (recited "monitored one at a time" and "the scheme detects misbehavior of flows over a period of time" correlates to environmental conditions meeting the predetermined criteria include time of day; column 22, lines 8 – 16).

Regarding Claim 15, Hoffman et al. disclose the limitation of the environmental conditions meeting the predetermined criteria including network configuration changes (recited "depending on the configuration of the network" and "allows the switching element to responds to varying network situation" correlates to the environmental conditions meeting the predetermined criteria including network configuration changes; column 13, lines 11 –19).

Regarding claim 17, Hoffman et al. disclose the limitation of the method of claimed wherein the network configuration changes include network congestion (recited "congestion may occur in the network element" correlates to network configuration changes include network congestion; column 21, lines 37 – 41).

Regarding Claim 19, Hoffman et al. disclose the limitation of the environmental conditions meeting the predetermined criteria including line use of high level protocols (recited "address independent classes" correlates to environmental conditions meeting the predetermined criteria; "ARP, RSVP" or "http" as high level protocols; column 13, lines 14 – 29, lines 62 – 65).

Regarding Claim 24, Hoffman et al. disclose the limitation of the method of claimed wherein at least some of the traffic patterns are based on specified IP flows (recited "when the class indicates that the packet is of a class hardware routable IP" correlates to the

traffic patterns are based on specified IP flows; column 13, lines 20 – 29; column 14, lines 29 – 31).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 11, 16, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffman et al. (US 6094435) in view of Bowman-Amuah (US 6427132 B1).

Regarding Claim 11, Hoffman et al. disclose a packet forwarding device (recited "multilayer network element" correlates to a packet forwarding device; Fig.1, Fig. 2, element 12, column 8, lines 55 – 60). Hoffman et al. do not disclose explicitly the protocol of traffic includes FTP. Bowman-Amuah discloses the limitation of a packet forwarding device (Fig. 1A, element Data Access Points; column 26, lines 47 – 56) and the protocol of traffic including FTP (recited " support for ftp for file transfer" correlates to the protocol of traffic including FTP; column 111, lines 56 – 57).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hoffman et al. to include a protocol of traffic includes FTP such as that taught by Bowman-Amuah in order to provide a system, method and article

of manufacture are provided for demonstrating ecommerce capabilities on a network via a simulation as suggested by Bowman-Amuah (see column 2, lines 12 – 14).

Regarding Claim 16, Hoffman et al. disclose a packet forwarding device (recited "multilayer network element" correlates to a packet forwarding device; Fig.1, Fig. 2, element 12, column 8, lines 55 – 60). Hoffman et al. also teach network configuration changes (recited "depending on the configuration of the network" and "allows the switching element to responds to varying network situation" correlates to the environmental conditions meeting the predetermined criteria including network configuration changes; column 13, lines 11 –19).

Hoffman et al. do not disclose explicitly the method claimed the network configuration changes including network failures.

Bowman-Amuah discloses the limitation of the method of claimed herein the network configuration changes including network failures (Fig. 28, recited "configuration changes to address network problems" correlates to network configuration changes including network failures; Fig. 2, column 72, lines 39 – 47).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hoffman et al. to include the method of claimed herein the network configuration changes including network failures such as that taught by Bowman-Amuah in order to provide a system, method and article of manufacture are provided for demonstrating ecommerce capabilities on a network via a simulation as suggested by Bowman-Amuah (see column 2, lines 12 – 14).

Regarding Claim 18, Hoffman et al. disclose a packet forwarding device (recited "multilayer network element" correlates to a packet forwarding device; Fig.1, Fig. 2, element 12, column 8, lines 55 – 60). Hoffman et al. also teach network configuration changes (recited "depending on the configuration of the network" and "allows the switching element to responds to varying network situation" correlates to the environmental conditions meeting the predetermined criteria including network configuration changes; column 13, lines 11 –19).

Hoffman et al. do not disclose explicitly the method of claimed wherein the network configuration changes including network error rates.

Bowman-Amuah discloses the limitation of the method of claimed wherein the network configuration changes including network error rates (recited "a poor error rate at these speeds " correlates to including network error rates; column 49, lines 27 – 37). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hoffman et al. to include the method of claimed wherein the network configuration changes including network error rates such as that taught by Bowman-Amuah in order to order to provide a system, method and article of manufacture are provided for demonstrating ecommerce capabilities on a network via a simulation as suggested by Bowman-Amuah (see column 2, lines 12 – 14).

***Response to Arguments***

8. Applicant's arguments filed 4/10/2007 with respect to claims 1, 3 – 24 have been fully considered but they are not persuasive.

The rejections for claims 1 and 20 under 35 U.S.C. section 112 first paragraph for failing to comply with the written description requirement maintain. The applicant's argument has been fully considered but they are not persuasive. The justification provided by the Applicant (Pub No. US 20020021701,paragraph [0047]) do not clearly correlate to the amended claim.

Applicant argues Reference Hoffman does not mention or suggest the claimed limitations of "selectively modifying the priority". Examiner contends Hoffman does teach and suggest "selectively modifying the priority". Referring to reference Hoffman, column 5, lines 51 - 67 and column 6, lines 1 - 5, "modify the priority information based on" reads on "selectively modifying the priority", the referenced paragraphs indicate the claimed limitation.

Applicant also argues that the Examiner attempting to combine two non-analogous references to meet the claim invention. This statement is not true. Regrading claims 11, 16, and 18, the claims are merely in network and traffic management and control, reference Bowman-Amuah is legitimate scenario for network management as a whole, also the claimed limitations of "traffic includes FTP", "network failure" and "network error rates" are generic and obvious in any network and traffic management configuration. Reference Hoffman is in bit and byte traffic mapping, bandwidth control and device level, while reference Bowmand-Amuah is in network level using the switching devices.

Reference Bowmand-Amuah teaches a prototype network system provided for demonstarting capabilities of a high speed broadband network. The prototype network is a description of a business simulator adapted to illustrate business capabilities of the prototype high speed broadband networking, using e-commence as application example.

***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Kadambi et al. (US 6850521 B1) disclose a network switch for switching packets from a source to a destination includes a source port for receiving an incoming packet from a source, a destination port which contains a path to a destination for the packet, and a filter unit for constructing and applying a filter to selected fields of the incoming packet.
- Wilford et al. (6687247 B1) disclose a linecard architecture for high speed routing of data in a communications device. This architecture provides low latency routing based on packet priority: packet routing and processing occurs at line rate (wire speed) for most operations.
- Ahearn et al. (5926463) disclose a method and apparatus for viewing a configuration of a computer network by polling a plurality of switches and routers present in the network to obtain copies of information stored in databases on the switches and routers.

10. All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Lee whose telephone number is (571) 272-3131. The examiner can normally be reached on Monday through Friday from 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached on (571) 272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

6/11/07

/Andrew C. Lee/::<6/08/2007>

WING CHAN
SUPERVISORY PATENT EXAMINER